MONITORING PATIENTS ON ANTI-TUBERCULOUS THERAPY

VDH STANDARD PROTOCOL

(*The following are standard general guidelines. All patients are closely monitored for adverse reactions throughout their course of treatment).*

**For further information see

- CORE CURRICULUM ON TUBERCULOSIS, 3RD Edition.
- TB CARE GUIDE Highlights from the Core Curriculum of Tuberculosis.
- American Thoracic Society (ATS) Statement on the

  TREATMENT OF TUBERCULOSIS AND TUBERCULOSIS INFECTION IN ADULTS AND CHILDREN

A. TREATMENT FOR LATENT TUBERCULOSIS (TB Infection)

I. Baseline AST for all patients starting INH therapy.
II. Dispense no more than one-month supply of medication.
III. A monthly patient assessment for adverse reactions is standard.
IV. Follow with monthly AST as indicated. Indicated for persons who develop side effects to INH and recommended for persons who

- Are age 35 or older
- Are women in the postpartum period
- Are HIV +
- Are using other medications that may cause drug interactions
- May abuse alcohol
- Have a history of liver disease
- Inject drugs

I. Use of Pyridoxine (Vitamin B6) with INH

Indicated for persons with conditions in which neuropathy is common, such as

- Diabetes
- Pregnancy and during the postpartum period

- HIV +
- Malnutrition
- Alcoholism
- Renal failure
- Seizure disorders

I. 10-20% of person taking INH will have some mild, asymptomatic elevations of hepatic enzymes. If the measurements exceed three times the upper limit of normal or the patient reports symptoms of adverse reactions, consider discontinuation of INH.

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Monitoring Patients on Anti-Tuberculosis Therapy

VDH Standard Protocol

A. TREATMENT FOR TUBERCULOSIS DISEASE (requires the use of multiple anti-TB medications)

I. Baseline AST/ALT/ bilirubin on **all** patients. Follow with monthly if indicated (see A. II).
II. Baseline CBC with platelets on all patients starting Rifampin/Rifabutin.
III. Baseline uric acid for patients starting PZA. Follow with monthly as indicated (i.e. history of gout).
IV. Baseline visual acuity and color vision screen for all patients starting on Ethambutol. Follow with monthly screening while on Ethambutol.
V. Directly Observed Therapy (DOT) is the standard for Virginia.
VI. If patient must be on self-administered therapy the use of Rifamate (a combination of INH and Rifampin) is encouraged. Self-administered therapy must be daily.
VII. Dispense no more than one-month supply of medications.
VIII. All patients should be monitored closely for adverse reactions to medications. At a minimum the monthly nursing assessment for adverse reactions is documented in the record.
IX. Add Pyridoxine (Vitamin B6) if indicated (see A. III).
X. Baseline and monthly serum creatinine and blood urea nitrogen as well as audiometry for patients being treated with Streptomycin, Kanamycin.

A. Potential Drug Interactions

I. The interaction of INH and phenytoin increases the serum concentration of both drugs. If used concomitantly refer to PMD to monitor serum level of phenytoin, as dosage may need to be decreased.
II. Rifampin may accelerate the clearance of drugs metabolized by the liver (i.e. methadone, coumadin derivatives, glucocorticoids, estrogens, oral hypoglycemic agents, digitoxin, antiarrhythmic agents, theophylline, anticonvulsants, ketoconazole, and cyclosporin). Rifampin accelerates estrogen metabolism and so may interfere with the effectiveness of oral contraceptives.
III. Current literature should be consulted concerning other possible drug interactions.